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PROBLEMS OF SAINTPAULIA

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African violets, Saintpaulia ionantha Wendl., are native to East Africa. In their native habitat, these plants may be grown in a temperature range of 40-80°F but the best range is between 70 and 72°F. These beautiful plants are not affected by a large number of fungus parasites, but occasionally diseases become troublesome.

CROWM ROT. The most serious disease of African violets is a root and crown rot, Pythium ultimum Trow. In some plants, the above-ground parts show no definite symptoms, but the entire crown can be easily lifted from the surface of the soil. Roots on affected plants are brown and decayed. A forerunner of crown rot is frequently a single, discolored, watersoaked lesion, with a weft of white fungus mycelia (Fig. 1), usually found on a leaf beneath the top canopy of leaves.

Fig. 1. Mycelial weft of Pythium on Saintpaulia leaves.

Control. Root and crown rot should not become a problem if the rooting media and potting soil are sterilized before use. Fermate applied as a spray is an excellent stop-gap treatment when an infestation of this fungus is discovered in a planting of African violets. Use 1 to 2 tablespoons of Fermate to 1 gallon of water. Prepare a paste of the powder in a small quantity of water before adding the whole amount of the liquid.

BOT BLIGHT. Botrytis, Botrytis cinerea Pers. ex Fr., leaf and blossom blight, is more serious under conditions of high humidity and low temperature. The first symptom is a small, watersoaked lesion which appears on the underside of the leaf petiole in the proximity of the pot rim. These lesions may enlarge rapidly, sometimes extending the entire length of the petiole, and moving into the leaf blade (Fig. 2). Watersoaked lesions are usually localized at the point of infection, a characteristic that identifies the fungus Botrytis.

The blossom blight phase of this disease often originates in the throat of the corolla, producing premature fading and a watersoaked appearance. Infected corollae may fall onto healthy leaves supplying additional inoculum and new leaf infection.

Fig. 2. Typical Botrytis blight on Saintpaulia leaves.

Control. Sanitation and adequate spacing of the plants are most important in disease control. The progress of the disease may be checked by lowering the humidity and raising the temperature. All diseased and dead tissue should be removed from the plants to prevent an accumulation of the causal fungus.

PETIOLE ROT. Two additional problems of Saintpaulia are petiole rot and ring-spot. Both are of a non-infectious nature. Petiole rot is caused by chemical injury brought on by an accumulation of soil salts on the rim of the pot or on the soil surface. This breakdown begins with an orange-brown or rust-colored lesion at the point where the petiole comes in contact with the pot rim or at the base of the petiole where it is in contact with the soil (Fig. **3)**.

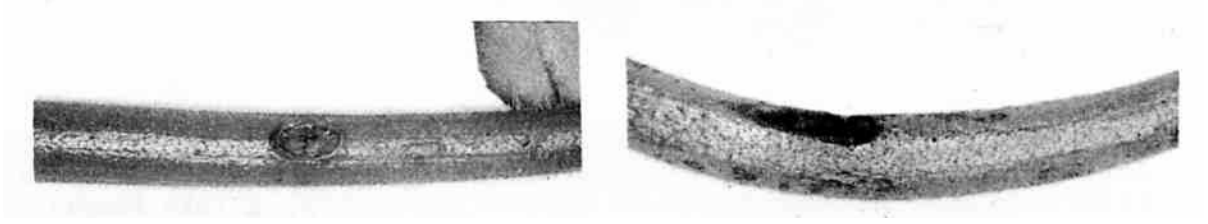

Fig. 3- Brown, slightly sunken lesions on petioles of Saintpaulia.

Control. Yearly transfer of specimen plants to new pots and fresh potting soil will prevent this condition.

RINGSPOT. Chlorotic, yellow-green to white ring patterns appear on a dark green background. Rings vary in size and shape as well as in number (Fig. 4). The patterns produced on these leaves look enough like a virus problem that frequent collections are made by inspectors. This chlorotic condition is thought to occur when water that is cooler than the air temperature is sprayed on the leaves, or when direct sun shines on wet leaves.

Fig. 4- Circular to irregular chlorotic patterns in the leaves of Saintpaulia.

Control. Water plants in a saucer or use water a few degrees warmer than the air temperature and provide adequate shade.

Literature Reviewed:

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